Nuclear Instruments and Methods in Physics Research B 91 (1994) 701–711
North-Holland

NIM B
Beam Interactions with Materials & Atoms

Author index

Akazawa, H., M. Nagase and Y. Utsumi, Synchrotron radiation stimulated evaporation and defect formation in a-SiO_2 . . . 91 (1994) 644
Alfano, R.R., see Haglund, Jr., R.F. . . . 91 (1994) 493
Allen, A.M.T., see Comins, J.D. . . . 91 (1994) 196
Anedda, A., F. Congiu, F. Raga, A. Corazza, M. Martini, G. Spinolo and A. Vedda, Time resolved photoluminescence of α centers in neutron irradiated SiO_2 . . . 91 (1994) 405
Angert, N., see Vetter, J. . . . 91 (1994) 129
Aoki, Y., D.M. Rück, D. Vogt, K. Leible, I. Khubeis and O. Meyer, Vickers hardness measurement of ion implanted MgO . . . 91 (1994) 247
Aoki, Y., see Shimatani, N. . . . 91 (1994) 529
Aoyagi, K., see Yoshinari, T. . . . 91 (1994) 230
Apel, P., see Esser, M. . . . 91 (1994) 157
Arai, S., see Shimatani, N. . . . 91 (1994) 529
Arnold, G.W., see Mazzoldi, P. . . . 91 (1994) 478
Arnold, G.W., see Mazzoldi, P. . . . 91 (1994) 505
Asari, E., I. Kamioka, W.A. Lewis, T. Kawabe, K.G. Nakamura and M. Kitajima, Ion mass effect on lattice disordering rate of graphite under low energy ion irradiation . . . 91 (1994) 545
Atobe, K., see Nakagawa, M. . . . 91 (1994) 354
Atobe, K., see Okada, M. . . . 91 (1994) 359
Awano, T. and T. Matsuyama, Self-trapped holes in ammonium silver bromide crystal . . . 91 (1994) 227
Awazu, K., see Suzuki, R. . . . 91 (1994) 410
Awazu, K. and K. Watanabe, Generation of paramagnetic centers in bulk SiO_2 and Si/SiO_2 structures by gamma-ray irradiation . . . 91 (1994) 422

Bacci, C., see Furetta, C. . . . 91 (1994) 215
Bacci, C., see Scacco, A. . . . 91 (1994) 223
Baetzold, R.C., see Song, K.S. . . . 91 (1994) 183
Balanzat, E., S. Bouffard, A. Cassimi, E. Doorhyee, L. Protin, J.P. Grandin, J.L. Doualan and J. Margerie, Defect creation in alkali-halides under dense electronic excitations: experimental results on NaCl and KBr . . . 91 (1994) 134
Balanzat, E., S. Bouffard, A. Le Moël and N. Betz, Physico-chemical modifications induced in polymers by swift heavy ions . . . 91 (1994) 140
Balanzat, E., see Betz, N. . . . 91 (1994) 151
Balanzat, E., see Chailley, V. . . . 91 (1994) 162
Battaglin, G., see Mazzoldi, P. . . . 91 (1994) 478
Battaglin, G., see Mazzoldi, P. . . . 91 (1994) 505
Beng, R.-Z., see Zhu, J.-L. . . . 91 (1994) 469
Bennewitz, R., M. Reichling, R.M. Wilson, R.T. Williams, K. Holldack, M. Grunze and E. Matthias, Characterization of Ca aggregates on CaF_2 (111)-surfaces by atomic force, XPS, and fluorescence microscopy . . . 91 (1994) 623
Benyagoub, A., see Marty, J.M. . . . 91 (1994) 274
Bertoncello, R., see Mazzoldi, P. . . . 91 (1994) 478
Bertoncello, R., see Mazzoldi, P. . . . 91 (1994) 505
Betz, N., see Balanzat, E. . . . 91 (1994) 140
Betz, N., C. Ducouret, A. Le Moël and E. Balanzat, A study on radiation grafting of styrene induced by swift heavy-ions in poly(vinylidene fluoride) . . . 91 (1994) 151
Blieden, G.S., J.D. Comins and T.E. Derry, Zero-phonon line broadening in ion bombarded LiF . . . 91 (1994) 192
Blieden, G.S., see Comins, J.D. . . . 91 (1994) 196
Boscolo-Boscoletto, A., see Mazzoldi, P. . . . 91 (1994) 505
Bouffard, S., see Toulemonde, M. . . . 91 (1994) 108
Bouffard, S., see Balanzat, E. . . . 91 (1994) 134
Bouffard, S., see Balanzat, E. . . . 91 (1994) 140

0168-583X/94/$07.00 © 1994 – Elsevier Science B.V. All rights reserved

Bouffard, S., see Chailley, V. 91 (1994) 162
Brenier, R., see Canut, B. 91 (1994) 312
Brinkmalm, G., see Papaléo, R.M. 91 (1994) 124
Brinkmalm, G., see Papaléo, R.M. 91 (1994) 667
Brinkmalm, G., see Papaléo, R.M. 91 (1994) 677
Brisard, F., see Costantini, J.M. 91 (1994) 288
Brown, I.G., see Cao, D.X. 91 (1994) 280
Brüchle, W., see Esser, M. 91 (1994) 157

Caccavale, F., see Mazzoldi, P. 91 (1994) 505
Cai, Y., see Chen, L.F. 91 (1994) 614
Calcagno, L., R. Percolla and G. Foti, Interdiffusion in polystyrene crosslinked by ion irradiation 91 (1994) 426
Calcagno, L., P. Musumeci, R. Percolla and G. Foti, Calorimetric measurements of MeV ion irradiated polyvinylidene fluoride 91 (1994) 461
Canut, B., see Marty, J.M. 91 (1994) 274
Canut, B., R. Brenier, A. Meftah, P. Moretti, S.O. Salem, S.M.M. Ramos, P. Thevenard and M. Toulemonde, Damage induced in $LiNbO_3$ single crystals by GeV gadolinium ions 91 (1994) 312
Cao, D.X., D.K. Sood and I.G. Brown, Thermal annealing of single crystal zirconia implanted with platinum ions 91 (1994) 280
Carturan, S., see Pivin, J.C. 91 (1994) 455
Cassimi, A., see Balanzat, E. 91 (1994) 134
Cattaruzza, E., see Mazzoldi, P. 91 (1994) 505
Chadderton, L.T., D. Fink, Y. Gamaly, H. Moeckel, L. Wang, H. Omichi and F. Hosoi, Synthesis of buckminsterfullerene in the wake of energetic ions 91 (1994) 71
Chadderton, L.T., see Fink, D. 91 (1994) 146
Chadderton, L.T., J.L. Zhu, S.A. Cruz, D. Fink and S. Ghosh, Electronic stopping and etched particle tracks in polymers 91 (1994) 168
Chailley, V., E. Dooryhée, S. Bouffard, E. Balanzat and M. Levalois, Observations by X-ray diffraction of structural changes in mica irradiated by swift heavy ions 91 (1994) 162
Chakraborty, P., see Mazzoldi, P. 91 (1994) 505
Chase, L.L., Pump-probe method for investigating laser ablation and optical damage threshold mechanisms in optical materials 91 (1994) 597
Chayahara, A., see Fukumi, K. 91 (1994) 413
Chen, L.F., Y. Cai and K.S. Song, Excitonic mechanism of athermal halogen atom desorption from NaBr, KBr and RbBr 91 (1994) 614
Chen, Y., see Evans, B.D. 91 (1994) 258
Chiang, C.I., H. Holleck and O. Meyer, Properties of RF sputtered B_4C thin films 91 (1994) 692
Chiwaki, M., see Suzuki, R. 91 (1994) 410
Cillessen, J.F.M., see Overwijk, M.H.F. 91 (1994) 322
Comins, J.D., see Blieden, G.S. 91 (1994) 192
Comins, J.D., G. Lotter, G.S. Blieden and A.M.T. Allen, Dynamics of early stage defect production in irradiated alkali halides 91 (1994) 196
Congiu, F., see Anedda, A. 91 (1994) 405
Cooper, E.A. and M. Nastasi, Ion beam mixing of marker layers into amorphous aluminum oxide 91 (1994) 558
Corazza, A., see Anedda, A. 91 (1994) 405
Costantini, J.M., F. Brisard, A. Meftah, F. Studer and M. Toulemonde, Damage and conductivity of yttrium iron garnet irradiated with GeV-heavy ions 91 (1994) 288
Cremona, M., see Furetta, C. 91 (1994) 215
Cruz, S.A., see Chadderton, L.T. 91 (1994) 168
Cui, F.Z., H.D. Li, L. Jin and Y.Y. Li, Simulations on radiation damage initiated by O(1) PKA in $YBa_2Cu_3O_7$ 91 (1994) 374

Danziger, M., A. Schulz, V.V. Trofimov and K. Prokert, Latent track structure in polymers as observed by a highly sensitive electrolytical conductivity measurement 91 (1994) 172
De Araújo, M.A., see Rizzatti, M.R. 91 (1994) 442
De Araújo, M.A., see Rizzatti, M.R. 91 (1994) 450
Della Mea, G., see Pivin, J.C. 91 (1994) 455
Demirev, P., see Papaléo, R.M. 91 (1994) 124
Demirev, P., see Papaléo, R.M. 91 (1994) 667
Demirev, P., see Papaléo, R.M. 91 (1994) 677
Derry, T.E., see Blieden, G.S. 91 (1994) 192

Devine, R.A.B., Macroscopic and microscopic effects of radiation in amorphous SiO_2 . . . . . 91 (1994) 378
Dickinson, J.T., The role of defects in the laser ablation of wide bandgap materials 91 (1994) 634
Dickinson, J.T., J.-J. Shin, W. Jiang and M.G. Norton, Evidence for unzipping reactions in the laser ablation of polytetrafluoroethylene (PTFE) 91 (1994) 672
Döbeli, M., see Perez, A. 91 (1994) 187
Donovan, E.P., see Hubler, G.K. 91 (1994) 540
Doorhyee, E., see Balanzat, E. 91 (1994) 134
Dooryhée, E., see Chailley, V. 91 (1994) 162
Dorikens, M., see Laermans, C. 91 (1994) 350
Dorikens-Vanpraet, L., see Laermans, C. 91 (1994) 350
Dorsinville, R., see Haglund, Jr., R.F. 91 (1994) 493
Doualan, J.L., see Balanzat, E. 91 (1994) 134
Ducouret, C., see Betz, N. 91 (1994) 151

Eglitis, R.I., see Kotomin, E.A. 91 (1994) 83
Endo, F., see Nanto, H. 91 (1994) 205
Ensinger, W., see Schiestel, S. 91 (1994) 473
Eriksson, J., see Papaléo, R.M. 91 (1994) 124
Eriksson, J., see Papaléo, R.M. 91 (1994) 667
Eriksson, J., see Papaléo, R.M. 91 (1994) 677
Esser, M., P. Apel, W. Brüchle, J. Fuhrmann, B. Heinrich, G. Remmert, R. Spohr, C. Trautmann and J. Vetter, Solvent induced track sensitization. Swelling and diffusion measurements 91 (1994) 157
Evans, B.D., G.J. Pogatshnik and Y. Chen, Optical properties of lattice defects in α-Al_2O_3 . . . . . 91 (1994) 258
Evans, N.D., see Joslin, D.L. 91 (1994) 562
Evelyn, A.L., see Ila, D. 91 (1994) 580
Ewing, R.C., The metamict state: 1993 – the centennial 91 (1994) 22

Fenyö, D., see Papaléo, R.M. 91 (1994) 667
Fink, D., see Chadderton, L.T. 91 (1994) 71
Fink, D., L.T. Chadderton, F. Hosoi, H. Omichi, T. Sasuga, A. Schmoldt, L. Wang, R. Klett and J. Hillenbrand, Chemical modification of PMMA by MeV and GeV, light and heavy, ion irradiations 91 (1994) 146
Fink, D., see Chadderton, L.T. 91 (1994) 168
Fladry, H., N. Tegen and G.K. Wolf, Ion beam induced adhesion improvement of metal layers – a comparative study on composite layers 91 (1994) 575
Forster, M., see Hasegawa, M. 91 (1994) 263
Foti, G., see Calcagno, L. 91 (1994) 426
Foti, G., see Calcagno, L. 91 (1994) 461
Fuhrmann, J., see Esser, M. 91 (1994) 157
Fujii, K., see Fukumi, K. 91 (1994) 413
Fujii, K., see Shimatani, N. 91 (1994) 529
Fujita, T., M. Fukui, S. Okada, T. Shimizu-Iwayama, T. Hioki and N. Itoh, Anomalous defect processes in Si implanted amorphous SiO_2, II 91 (1994) 418
Fukui, M., see Fujita, T. 91 (1994) 418
Fukumi, K., A. Chayahara, K. Fujii, J. Hayakawa and M. Satou, Structure of oxygen, boron and nickel ion implanted silica glasses 91 (1994) 413
Fukumoto, K., C. Kinoshita, S. Maeda and K. Nakai, The mechanism of radiation-resistance of $MgO \cdot nAl_2O_3$ through the formation process of defect clusters under irradiation 91 (1994) 252
Furetta, C., C. Bacci, V. Mendozzi, C. Sanipoli, A. Scacco, M. Cremona and R.M. Montereali, Modifications induced by ionizing radiations in the luminescence from single crystals of LiF : Mg,Cu,P 91 (1994) 215
Furetta, C., see Scacco, A. 91 (1994) 223
Furuno, S., see Hojou, K. 91 (1994) 534

Gamaly, Y., see Chadderton, L.T. 91 (1994) 71
Ghosh, S., see Chadderton, L.T. 91 (1994) 168
Gogoll, S., see Reichling, M. 91 (1994) 628
Gonella, F., see Mazzoldi, P. 91 (1994) 478
Gossett, C.R., see Hubler, G.K. 91 (1994) 540
Grandin, J.P., see Balanzat, E. 91 (1994) 134
Grunze, M., see Bennewitz, R. 91 (1994) 623
Guizard, S., see Petite, G. 91 (1994) 338

Guo, Y.-P., see Liu, Z.-M. 91 (1994) 465
Guo, Y.-P., see Zhu, J.-L. 91 (1994) 469

Haglund, Jr., R.F., L. Yang, R.H. Magruder, III, C.W. White, R.A. Zuhr, L. Yang, R. Dorsinville and R.R. Alfano, Nonlinear optical properties of metal-quantum-dot composites synthesized by ion implantation . . 91 (1994) 493
Håkansson, P., see Papaléo, R.M. 91 (1994) 124
Håkansson, P., see Papaléo, R.M. 91 (1994) 667
Håkansson, P., see Papaléo, R.M. 91 (1994) 677
Hallén, A., see Papaléo, R.M. 91 (1994) 124
Hallén, A., see Papaléo, R.M. 91 (1994) 677
Haneda, H., see Hishita, S. 91 (1994) 571
Haraya, K., see Kobayashi, Y. 91 (1994) 447
Hasegawa, M., Y. Nagashima, K. Kawashima, T. Hyodo, S. Yamaguchi, M. Forster and H.-E. Schaefer, Irradiation-induced voids in alumina single crystal studied by positron annihilation 91 (1994) 263
Hattori, S., see Kobayashi, Y. 91 (1994) 447
Hayakawa, J., see Fukumi, K. 91 (1994) 413
Heinrich, B., see Esser, M. 91 (1994) 157
Hillenbrand, J., see Fink, D. 91 (1994) 146
Hioki, T., see Fujita, T. 91 (1994) 418
Hioki, T., see Takeda, Y. 91 (1994) 515
Hirai, M., see Mori, H. 91 (1994) 391
Hirai, Y., see Nanto, H. 91 (1994) 205
Hirashima, H., see Imai, H. 91 (1994) 400
Hirose, S., see Kamada, M. 91 (1994) 619
Hishita, S., H. Haneda and S. Suehara, Chemical states of implanted ions in an oxide crystal 91 (1994) 571
Hobbs, L.W., Topology and geometry in the irradiation-induced amorphization of insulators 91 (1994) 30
Hojou, K., S. Furuno, K.N. Kushita, H. Otsu and K. Izui, In situ observation of the damage evolution in β-SiC crystals during helium and hydrogen dual-ion irradiations 91 (1994) 534
Holldack, K., see Bennewitz, R. 91 (1994) 623
Holleck, H., see Chiang, C.I. 91 (1994) 692
Horino, Y., see Kohno, H. 91 (1994) 366
Horino, Y., see Shimatani, N. 91 (1994) 529
Hosoi, F., see Chadderton, L.T. 91 (1994) 71
Hosoi, F., see Fink, D. 91 (1994) 146
Hosono, H. and H. Kawazoe, Radiation-induced coloring and paramagnetic centers in synthetic SiO_2:Al glasses 91 (1994) 395
Hosono, H. and H. Imagawa, Ion–solid chemistry in implanted amorphous SiO_2 . . . . . 91 (1994) 510
Hosono, H., see Matsunami, N. 91 (1994) 525
Hubler, G.K., E.P. Donovan and C.R. Gossett, Ion beam assisted deposition of hydrogenated amorphous silicon nitride 91 (1994) 540
Hyodo, T., see Hasegawa, M. 91 (1994) 263

Igarashi, T., see Nakamae, K. 91 (1994) 659
Ikeda, S., see Kohno, H. 91 (1994) 366
Ikeya, M., ESR dating, dosimetry and microscopy. A trip to interdisciplinary fields as a wanderer from physics of defects 91 (1994) 43
Ikeya, M., see Ogoh, K. 91 (1994) 331
Ikeya, M., see Kohno, H. 91 (1994) 366
Ikeya, M., see Yamanaka, C. 91 (1994) 370
Ila, D., A.L. Evelyn and G.M. Jenkins, Ion beam induced carbonization of partially cured phenolic resin 91 (1994) 580
Imagawa, H., see Hosono, H. 91 (1994) 510
Imai, H. and H. Hirashima, Similarity of defect generation in silica glasses irradiated with γ-rays and 5.0- and 6.4-eV excimer lasers 91 (1994) 400
Inabe, K., N. Takeuchi and S. Owaki, Initial stage of sodium cluster formation in NaCl after intense electron pulse irradiation 91 (1994) 201
Inabe, K., see Nanto, H. 91 (1994) 205
Ishida, M., T. Tomita, H. Tayanaka and T. Nakamura, Electron irradiation and selective Si epitaxial growth on Al_2O_3 . . . . . 91 (1994) 654
Ishii, Y., see Noda, K. 91 (1994) 307
Ishikawa, Y. and N. Shibata, Formation mechanisms of dislocation and Si island in low-energy SIMOX 91 (1994) 520
Ismailov, K., see Mürk, V. 91 (1994) 327
Ito, E., see Ogoh, K. 91 (1994) 331

Ito, Y., see Moriyama, H. 91 (1994) 317
Itoh, H., see Nakagawa, M. 91 (1994) 354
Itoh, N., see Noda, K. 91 (1994) 307
Itoh, N., see Fujita, T. 91 (1994) 418
Iwabuchi, Y., see Ohnishi, A. 91 (1994) 210
Iwabuchi, Y., see Kondo, Y. 91 (1994) 219
Iwaki, M., see Suzuki, Y. 91 (1994) 584
Iwaki, M., see Suzuki, Y. 91 (1994) 588
Izu, T., see Shiiyama, K. 91 (1994) 284
Izui, K., see Hojou, K. 91 (1994) 534

Jacobs, P.W.M., see Kotomin, E.A. 91 (1994) 52
Jenkins, G.M., see Ila, D. 91 (1994) 580
Jiang, W., see Dickinson, J.T. 91 (1994) 672
Jin, L., see Cui, F.Z. 91 (1994) 374
Johansen, H., see Reichling, M. 91 (1994) 628
Joosen, W., see Petite, G. 91 (1994) 338
Joslin, D.L., see McHargue, C.J. 91 (1994) 549
Joslin, D.L., C.J. McHargue, C.W. White and N.D. Evans, Amorphization of sapphire during ion beam mixing 91 (1994) 562
Joslin, D.L., C.J. McHargue and C.W. White, Ion mixing in oxide–sapphire systems 91 (1994) 566
Jung, P., see Zhu, Z. 91 (1994) 269
Jung, P., Diffusion of implanted helium in Si and SiO_2 . . . . . 91 (1994) 362

Kaibara, M., see Suzuki, Y. 91 (1994) 588
Kakimoto, Y., see Niwase, K. 91 (1994) 78
Kakuta, T., see Shikama, T. 91 (1994) 342
Kamada, M. and S. Hirose, Time response of sputtering of excited-state sodium atoms from NaCl and NaF irradiated with synchrotron radiation 91 (1994) 619
Kamioka, I., see Asari, E. 91 (1994) 545
Kammer, H.-F., see Papaléo, R.M. 91 (1994) 667
Kan'no, K., see Ohnishi, A. 91 (1994) 210
Katoh, R., see Kimura, A. 91 (1994) 67
Katto, M., see Nakamae, K. 91 (1994) 659
Kawabata, Y., see Nakagawa, M. 91 (1994) 354
Kawabata, Y., see Okada, M. 91 (1994) 359
Kawabe, T., see Asari, E. 91 (1994) 545
Kawashima, K., see Hasegawa, M. 91 (1994) 263
Kawatsura, K., see Shimatani, N. 91 (1994) 529
Kawazoe, H., see Hosono, H. 91 (1994) 395
Kayano, H., see Shikama, T. 91 (1994) 342
Kelly, R., see Verdi, L. 91 (1994) 648
Kelly, R. and A. Miotello, Laser-pulse sputtering of atoms and molecules. Part II. Recondensation effects . . . 91 (1994) 682
Keppens, V. and C. Laermans, Ultrasonic study of the tunneling states in quartz amorphized by neutron irradiation 91 (1994) 346
Keppens, V., see Laermans, C. 91 (1994) 350
Kessener, Y.A.R.R., see Overwijk, M.H.F. 91 (1994) 322
Khubeis, I., see Aoki, Y. 91 (1994) 247
Kimura, A., K. Nakagawa, K. Tanaka, M. Kotani and R. Katoh, Effect of inner-shell excitation on color center formation in anthracene single crystal 91 (1994) 67
Kinoshita, C., see Fukumoto, K. 91 (1994) 252
Kinoshita, C., see Shiiyama, K. 91 (1994) 284
Kitajima, M., see Asari, E. 91 (1994) 545
Klett, R., see Fink, D. 91 (1994) 146
Kobayashi, Y., see Suzuki, R. 91 (1994) 410
Kobayashi, Y., K. Haraya, S. Hattori and T. Sasuga, Effect of electron-irradiation on the free volume of PEEK studied by positron annihilation 91 (1994) 447
Kohno, H., C. Yamanaka, M. Ikeya, S. Ikeda and Y. Horino, An ESR study of radicals in $CaCO_3$ produced by 1.6 MeV He^+- and γ-irradiation 91 (1994) 366
Kondo, Y., Y. Konno, N. Tamura, N. Mori and Y. Iwabuchi, Effects of X-ray irradiation on BaFBr single crystals at LHeT 91 (1994) 219

Kong, F., see Song, K.S. 91 (1994) 183
Konno, Y., see Kondo, Y. 91 (1994) 219
Koschnick, F.K., see Spaeth, J.-M. 91 (1994) 175
Kotani, M., see Kimura, A. 91 (1994) 67
Kotomin, E., see Soppe, W. 91 (1994) 87
Kotomin, E.A. and P.W.M. Jacobs, Theoretical simulations of the radiation-induced defect processes in insulating materials 91 (1994) 52
Kotomin, E.A., R.I. Eglitis and A.I. Popov, The kinetics of diffusion-controlled annealing of Frenkel defects in alkali halide crystals 91 (1994) 83
Kurauchi, T., see Takeda, Y. 91 (1994) 515
Kurosawa, K., see Nakamae, K. 91 (1994) 659
Kusakabe, M., see Suzuki, Y. 91 (1994) 584
Kusakabe, M., see Suzuki, Y. 91 (1994) 588
Kushita, K.N., see Hojou, K. 91 (1994) 534
Kutsuwada, M., see Shiiyama, K. 91 (1994) 284
Kuznetsov, A., see Mürk, V. 91 (1994) 327

Laermans, C., see Keppens, V. 91 (1994) 346
Laermans, C., V. Keppens, A. Van den Bosch, L. Dorikens-Vanpraet, D. Segers and M. Dorikens, Further measurements of positron annihilation lifetimes in neutron irradiated quartz 91 (1994) 350
Le Moël, A., see Balanzat, E. 91 (1994) 140
Le Moël, A., see Betz, N. 91 (1994) 151
Leible, K., see Aoki, Y. 91 (1994) 247
Levalois, M., see Chailley, V. 91 (1994) 162
Lewis, W.A., see Asari, E. 91 (1994) 545
Li, H.D., see Cui, F.Z. 91 (1994) 374
Li, Y.Y., see Cui, F.Z. 91 (1994) 374
Licciardello, A., see Puglisi, O. 91 (1994) 431
Licciardello, A. and O. Puglisi, Anomalous molecular weight distribution in ion irradiated polystyrene near the gel transition 91 (1994) 436
Linker, G., see Matzke, Hj. 91 (1994) 294
Liu, Z.-M., J.-L. Zhu, Y.-P. Guo, Z.-W. Yu, P.-P. Qian and Z.-T. Ma, Chemical effects of ion implantation in polyaniline 91 (1994) 465
Liu, Z.-M., see Zhu, J.-L. 91 (1994) 469
Livi, R.P., see Rizzatti, M.R. 91 (1994) 442
Livi, R.P., see Rizzatti, M.R. 91 (1994) 450
Lotter, G., see Comins, J.D. 91 (1994) 196

Ma, Z.-T., see Liu, Z.-M. 91 (1994) 465
Ma, Z.-T., see Zhu, J.-L. 91 (1994) 469
Maeda, S., see Fukumoto, K. 91 (1994) 252
Magruder, III, R.H., see Haglund, Jr., R.F. 91 (1994) 493
Makino, Y., Y. Setsuhara and S. Miyake, Microstructure of titanium oxide films synthesized by ion beam dynamic mixing 91 (1994) 696
Marest, G., see Marty, J.M. 91 (1994) 274
Margerie, J., see Balanzat, E. 91 (1994) 134
Martin, P., see Petite, G. 91 (1994) 338
Martini, M., see Anedda, A. 91 (1994) 405
Marty, J.M., A. Benyagoub, G. Marest, N. Moncoffre, M. Toulemonde, A. Meftah, F. Studer, B. Canut, S.M.M. Ramos and P. Thevenard, Mössbauer study of sapphire irradiated with high energy heavy ions . . . 91 (1994) 274
Matsue, H., I. Yamaguchi, T. Sekine and K. Yoshihara, A comparison of the hot atom reaction with the implantation reaction in metallocene and its cyclodextrin inclusion compounds 91 (1994) 97
Matsue, H., see Yoshihara, K. 91 (1994) 103
Matsumura, S., see Shiiyama, K. 91 (1994) 284
Matsunami, N. and H. Hosono, Depth profiles of deuterium and phosphorus colloid formation in $BaO \cdot P_2O_5$ glasses by D^+ ion irradiation 91 (1994) 525
Matsuyama, T., see Awano, T. 91 (1994) 227
Matsuyama, T., see Yoshinari, T. 91 (1994) 230
Matthias, E., see Bennewitz, R. 91 (1994) 623
Matthias, E., see Reichling, M. 91 (1994) 628
Matzke, Hj., A. Turos and G. Linker, Polygonization of single crystals of the fluorite-type oxide UO_2 due to high dose ion implantation 91 (1994) 294

Mazzoldi, P., G.W. Arnold, G. Battaglin, R. Bertoncello and F. Gonella, Peculiarities and application perspectives of metal-ion implants in glasses 91 (1994) 478
Mazzoldi, P., F. Caccavale, E. Cattaruzza, P. Chakraborty, L. Tramontin, A. Boscolo-Boscoletto, R. Bertoncello, F. Trivillin, G. Battaglin and G.W. Arnold, Colloid formation in copper-implanted fused silica and silicate glasses 91 (1994) 505
McCallum, J.C., T.W. Simpson and I.V. Mitchell, Time resolved reflectivity measurements of the amorphous-to-gamma and gamma-to-alpha phase transitions in ion-implanted Al_2O_3 . . . . . 91 (1994) 60
McHargue, C.J., D.L. Joslin and C.W. White, Ion beam mixing in insulator substrates 91 (1994) 549
McHargue, C.J., see Joslin, D.L. 91 (1994) 562
McHargue, C.J., see Joslin, D.L. 91 (1994) 566
Meftah, A., see Marty, J.M. 91 (1994) 274
Meftah, A., see Costantini, J.M. 91 (1994) 288
Meftah, A., see Canut, B. 91 (1994) 312
Meise, W., see Spaeth, J.-M. 91 (1994) 175
Mendozzi, V., see Furetta, C. 91 (1994) 215
Meyer, O., see Aoki, Y. 91 (1994) 247
Meyer, O., see Chiang, C.I. 91 (1994) 692
Mikado, T., see Suzuki, R. 91 (1994) 410
Miotello, A., see Verdi, L. 91 (1994) 648
Miotello, A., see Kelly, R. 91 (1994) 682
Mitchell, I.V., see McCallum, J.C. 91 (1994) 60
Miyake, K., see Ohashi, T. 91 (1994) 593
Miyake, S., see Makino, Y. 91 (1994) 696
Moeckel, H., see Chadderton, L.T. 91 (1994) 71
Mokuno, Y., see Shimatani, N. 91 (1994) 529
Moncoffre, N., see Marty, J.M. 91 (1994) 274
Montereali, R.M., see Furetta, C. 91 (1994) 215
Moretti, P., see Canut, B. 91 (1994) 312
Mori, H., Y. Suzuki and M. Hirai, Selective photobleaching of radiation-induced absorption in a-SiO_2 . . . . . 91 (1994) 391
Mori, N., see Ohnishi, A. 91 (1994) 210
Mori, N., see Kondo, Y. 91 (1994) 219
Moritani, K., see Moriyama, H. 91 (1994) 317
Moriyama, H., T. Nagae, K. Moritani and Y. Ito, In-situ luminescence measurement of irradiation defects in lithium silicates 91 (1994) 317
Motohiro, T., see Takeda, Y. 91 (1994) 515
Murayama, K., see Nanto, H. 91 (1994) 205
Mürk, V., A. Kuznetsov, B. Namozov and K. Ismailov, Relaxation of electronic excitations in YAG and YAP crystals 91 (1994) 327
Musumeci, P., see Calcagno, L. 91 (1994) 461

Nagae, T., see Moriyama, H. 91 (1994) 317
Nagase, M., see Akazawa, H. 91 (1994) 644
Nagashima, Y., see Hasegawa, M. 91 (1994) 263
Nakagawa, K., see Kimura, A. 91 (1994) 67
Nakagawa, M., M. Okada, Y. Kawabata, K. Atobe, H. Itoh and S. Nakanishi, Defects in SiO_2 crystals after neutron irradiations at 20 K and 360 K 91 (1994) 354
Nakagawa, M., see Okada, M. 91 (1994) 359
Nakai, K., see Fukumoto, K. 91 (1994) 252
Nakamae, K., K. Kurosawa, M. Ohmukai, M. Katto, M. Okuda, W. Sasaki, S. Nozawa and T. Igarashi, Radiation effects of vacuum ultraviolet lasers in amorphous Si_3N_4 films 91 (1994) 659
Nakamura, K.G., see Asari, E. 91 (1994) 545
Nakamura, S., see Nanto, H. 91 (1994) 205
Nakamura, T., see Ishida, M. 91 (1994) 654
Nakanishi, S., see Nakagawa, M. 91 (1994) 354
Nakazawa, T., see Noda, K. 91 (1994) 307
Namozov, B., see Mürk, V. 91 (1994) 327
Nanto, H., F. Endo, Y. Hirai, K. Murayama, S. Nasu, S. Taniguchi, S. Nakamura, K. Inabe and N. Takeuchi, Photostimulated luminescence in alkali halides induced by excitation with ionizing radiation 91 (1994) 205
Naramoto, H., see Shimatani, N. 91 (1994) 529
Narui, M., see Shikama, T. 91 (1994) 342
Nastasi, M., see Cooper, E.A. 91 (1994) 558

Nasu, S., see Nanto, H. 91 (1994) 205
Nishisaka, T., see Suzuki, Y. 91 (1994) 588
Niwase, K., Y. Kakimoto, I. Tanaka and T. Tanabe, A laser Raman study of D^+ and He^+ ion irradiated diamond and graphite 91 (1994) 78
Noda, K., A. Shluger, T. Nakazawa, Y. Ishii and N. Itoh, Migration behavior of lithium ions and tritium in Li_2O 91 (1994) 307
Noda, S., see Takeda, Y. 91 (1994) 515
Nogita, K. and K. Une, Radiation-induced microstructural change in high burnup UO_2 fuel pellets 91 (1994) 301
Norton, M.G., see Dickinson, J.T. 91 (1994) 672
Nozawa, S., see Nakamae, K. 91 (1994) 659

Ogoh, K., C. Yamanaka, S. Toyoda, M. Ikeya and E. Ito, ESR studies on radiation induced defects in high pressure phase SiO_2 . . . . . 91 (1994) 331
Ohashi, K., see Ohashi, T. 91 (1994) 593
Ohashi, T., K. Miyake and K. Ohashi, Molecular dynamics simulation of non-equilibrium low energy (1–100 eV) ion beam deposition processes 91 (1994) 593
Ohgaki, H., see Suzuki, R. 91 (1994) 410
Ohmukai, M., see Nakamae, K. 91 (1994) 659
Ohnishi, A., K. Kan'no, Y. Iwabuchi and N. Mori, Recombination luminescence from self-trapped excitons in BaFBr 91 (1994) 210
Okada, M., see Nakagawa, M. 91 (1994) 354
Okada, M., M. Nakagawa, K. Atobe and Y. Kawabata, Defects in TiO_2 crystals produced by neutron irradiations at 20 K 91 (1994) 359
Okada, S., see Fujita, T. 91 (1994) 418
Okuda, M., see Nakamae, K. 91 (1994) 659
Omichi, H., see Chadderton, L.T. 91 (1994) 71
Omichi, H., see Fink, D. 91 (1994) 146
Otsu, H., see Hojou, K. 91 (1994) 534
Overwijk, M.H.F., J.F.M. Cillessen, Y.A.R.R. Kessener and M.G. Tenner, Incorporation of Nd in pulsed-laser-deposited compared to ion-implanted $SrTiO_3$. 91 (1994) 322
Owaki, S., see Inabe, K. 91 (1994) 201

Papaléo, R.M., A. Hallén, J. Eriksson, G. Brinkmalm, P. Demirev, P. Håkansson and B.U.R. Sundqvist, Damaging of C_{60} films by MeV heavy ions 91 (1994) 124
Papaléo, R.M., see Rizzatti, M.R. 91 (1994) 442
Papaléo, R.M., G. Brinkmalm, D. Fenyö, J. Eriksson, H.-F. Kammer, P. Demirev, P. Håkansson and B.U.R. Sundqvist, MeV ion sputtering of polymers: correlation between secondary ion radial velocity distributions and heavy ion track structure 91 (1994) 667
Papaléo, R.M., A. Hallén, P. Demirev, G. Brinkmalm, J. Eriksson, P. Håkansson and B.U.R. Sundqvist, Electronic sputtering of carbon clusters from ion beam irradiated organic films 91 (1994) 677
Pendleton, W.E., see Wilson, R.M. 91 (1994) 12
Percolla, R., see Calcagno, L. 91 (1994) 426
Percolla, R., see Calcagno, L. 91 (1994) 461
Perez, A., M. Döbeli and H.A. Synal, Defect creation in tracks produced by high energy carbon clusters in LiF 91 (1994) 187
Petite, G., S. Guizard, W. Joosen and P. Martin, Multiphoton generation of STE in α-SiO_2 using subpicosecond UV laser pulses 91 (1994) 338
Pivin, J.C., G. Della Mea, V. Rigato, M. Tonidandel and S. Carturan, Correlation between the rheological properties and damaging of ion implanted kapton 91 (1994) 455
Pogatshnik, G.J., see Evans, B.D. 91 (1994) 258
Popov, A.I., see Kotomin, E.A. 91 (1994) 83
Prij, J., see Soppe, W.J. 91 (1994) 92
Prokert, K., see Danziger, M. 91 (1994) 172
Protin, L., see Balanzat, E. 91 (1994) 134
Puglisi, O. and A. Licciardello, Intratrack effects and track overlap in beam induced aggregation of polymers . 91 (1994) 431
Puglisi, O., see Licciardello, A. 91 (1994) 436

Qian, P.-P., see Liu, Z.-M. 91 (1994) 465

Raga, F., see Anedda, A. 91 (1994) 405
Ramogida, G., see Scacco, A. 91 (1994) 223

Ramos, S.M.M., see Marty, J.M. 91 (1994) 274
Ramos, S.M.M., see Canut, B. 91 (1994) 312
Reichling, M., see Bennewitz, R. 91 (1994) 623
Reichling, M., H. Johansen, S. Gogoll, E. Stenzel and E. Matthias, Laser-stimulated desorption and damage at polished CaF_2 surfaces irradiated with 532 nm laser light 91 (1994) 628
Remmert, G., see Esser, M. 91 (1994) 157
Rigato, V., see Pivin, J.C. 91 (1994) 455
Rizzatti, M.R., R.M. Papaléo, R.P. Livi and M.A. de Araújo, Morphological changes induced in PPS by ion bombardment: amorphisation and recrystallization ability 91 (1994) 442
Rizzatti, M.R., M.A. de Araújo and R.P. Livi, Study of the thermal stability of PPS films bombarded with B^+ and Ar^{2+} ions 91 (1994) 450
Rogulis, U., see Spaeth, J.-M. 91 (1994) 175
Rück, D.M., see Aoki, Y. 91 (1994) 247

Sagawa, T., see Shikama, T. 91 (1994) 342
Salem, S.O., see Canut, B. 91 (1994) 312
Sanada, K., see Shikama, T. 91 (1994) 342
Sanipoli, C., see Furetta, C. 91 (1994) 215
Sanipoli, C., see Scacco, A. 91 (1994) 223
Sasabe, H., see Suzuki, Y. 91 (1994) 588
Sasaki, W., see Nakamae, K. 91 (1994) 659
Sasuga, T., see Fink, D. 91 (1994) 146
Sasuga, T., see Kobayashi, Y. 91 (1994) 447
Satou, M., see Fukumi, K. 91 (1994) 413
Scacco, A., see Furetta, C. 91 (1994) 215
Scacco, A., C. Furetta, C. Bacci, G. Ramogida and C. Sanipoli, Defects in γ-irradiated $KMgF_3:Tl^+$ crystals . . 91 (1994) 223
Schaefer, H.-E., see Hasegawa, M. 91 (1994) 263
Schiestel, S., W. Ensinger and G.K. Wolf, Ion bombardment effects in conducting polymers 91 (1994) 473
Schmoldt, A., see Fink, D. 91 (1994) 146
Scholz, R., see Vetter, J. 91 (1994) 129
Schulz, A., see Danziger, M. 91 (1994) 172
Segers, D., see Laermans, C. 91 (1994) 350
Sekine, T., see Matsue, H. 91 (1994) 97
Sekine, T., see Yoshihara, K. 91 (1994) 103
Setsuhara, Y., see Makino, Y. 91 (1994) 696
Shan, Z.-J., see Zhang, J.-C. 91 (1994) 663
Shen, J.-Q., see Zhang, J.-C. 91 (1994) 663
Shibata, N., see Ishikawa, Y. 91 (1994) 520
Shiiyama, K., C. Kinoshita, H. Suzuki, T. Izu, M. Kutsuwada and S. Matsumura, Development of specimen holders for measuring electrical properties of oxides under electron irradiation in HVEM 91 (1994) 284
Shikama, T., M. Narui, T. Kakuta, H. Kayano, T. Sagawa and K. Sanada, Study of optical radiation from SiO_2 during reactor irradiation 91 (1994) 342
Shimanuki, S., see Yoshinari, T. 91 (1994) 230
Shimatani, N., K. Kawatsura, S. Arai, T. Shiono, Y. Horino, Y. Mokuno, K. Fujii, H. Takeshita, S. Yamamoto, Y. Aoki and H. Naramoto, High energy Ni ion implantation and thermal annealing for α-SiC single crystal . 91 (1994) 529
Shimizu-Iwayama, T., see Fujita, T. 91 (1994) 418
Shin, J.-J., see Dickinson, J.T. 91 (1994) 672
Shiono, T., see Shimatani, N. 91 (1994) 529
Shluger, A., see Noda, K. 91 (1994) 307
Simpson, T.W., see McCallum, J.C. 91 (1994) 60
Song, K.S., R.C. Baetzold and F. Kong, Stable geometries of the self-trapped exciton in alkali halide crystals . 91 (1994) 183
Song, K.S., see Chen, L.F. 91 (1994) 614
Sood, D.K., see Cao, D.X. 91 (1994) 280
Soppe, W. and E. Kotomin, Aggregation of Frenkel defects under irradiation: a mesoscopic approach 91 (1994) 87
Soppe, W.J. and J. Prij, Kinetic model calculations of colloid growth in NaCl 91 (1994) 92
Spaeth, J.-M., F.K. Koschnick, W. Meise and U. Rogulis, Cross relaxation in magnetic resonance as a tool to study spatial correlations between defects in insulators 91 (1994) 175
Spinolo, G., see Anedda, A. 91 (1994) 405
Spohr, R., see Esser, M. 91 (1994) 157
Stenzel, E., see Reichling, M. 91 (1994) 628
Stoneham, A.M., Radiation effects in insulators 91 (1994) 1

Studer, F., see Toulemonde, M. 91 (1994) 108
Studer, F., see Marty, J.M. 91 (1994) 274
Studer, F., see Costantini, J.M. 91 (1994) 288
Suehara, S., see Hishita, S. 91 (1994) 571
Sundqvist, B.U.R., see Papaléo, R.M. 91 (1994) 124
Sundqvist, B.U.R., see Papaléo, R.M. 91 (1994) 667
Sundqvist, B.U.R., see Papaléo, R.M. 91 (1994) 677
Suzuki, H., see Shiiyama, K. 91 (1994) 284
Suzuki, R., Y. Kobayashi, K. Awazu, T. Mikado, M. Chiwaki, H. Ohgaki and T. Yamazaki, Positron lifetime study on ion-implanted amorphous SiO_2 with a variable-energy pulsed positron beam 91 (1994) 410
Suzuki, Y., see Mori, H. 91 (1994) 391
Suzuki, Y., M. Kusakabe and M. Iwaki, Wettability control of polystyrene by ion implantation 91 (1994) 584
Suzuki, Y., M. Kusakabe, M. Kaibara, M. Iwaki, H. Sasabe and T. Nishisaka, Cell adhesion control by ion implantation into extra-cellular matrix 91 (1994) 588
Synal, H.A., see Perez, A. 91 (1994) 187

Takeda, Y., T. Hioki, T. Motohiro, S. Noda and T. Kurauchi, Nonlinear optical properties of Sn^+ ion-implanted silica glass 91 (1994) 515
Takeshita, H., see Shimatani, N. 91 (1994) 529
Takeuchi, N., see Inabe, K. 91 (1994) 201
Takeuchi, N., see Nanto, H. 91 (1994) 205
Tamura, N., see Kondo, Y. 91 (1994) 219
Tanabe, T., see Niwase, K. 91 (1994) 78
Tanaka, I., see Niwase, K. 91 (1994) 78
Tanaka, K., see Kimura, A. 91 (1994) 67
Taniguchi, S., see Nanto, H. 91 (1994) 205
Tayanaka, H., see Ishida, M. 91 (1994) 654
Tegen, N., see Fladry, H. 91 (1994) 575
Tenner, M.G., see Overwijk, M.H.F. 91 (1994) 322
Thevenard, P., see Marty, J.M. 91 (1994) 274
Thevenard, P., see Canut, B. 91 (1994) 312
Thoma, R.K.R., see Wilson, R.M. 91 (1994) 12
Tomita, T., see Ishida, M. 91 (1994) 654
Tonidandel, M., see Pivin, J.C. 91 (1994) 455
Toulemonde, M., S. Bouffard and F. Studer, Swift heavy ions in insulating and conducting oxides: tracks and physical properties 91 (1994) 108
Toulemonde, M., see Marty, J.M. 91 (1994) 274
Toulemonde, M., see Costantini, J.M. 91 (1994) 288
Toulemonde, M., see Canut, B. 91 (1994) 312
Toyoda, S., see Ogoh, K. 91 (1994) 331
Tramontin, L., see Mazzoldi, P. 91 (1994) 505
Trautmann, C., see Esser, M. 91 (1994) 157
Trivillin, F., see Mazzoldi, P. 91 (1994) 505
Trofimov, V.V., see Danziger, M. 91 (1994) 172
Trukhin, A.N., Self-trapped exciton luminescence in α-quartz 91 (1994) 334
Turos, A., see Matzke, Hj. 91 (1994) 294

Une, K., see Nogita, K. 91 (1994) 301
Utsumi, Y., see Akazawa, H. 91 (1994) 644

Van den Bosch, A., see Laermans, C. 91 (1994) 350
Vedda, A., see Anedda, A. 91 (1994) 405
Verdi, L., A. Miotello and R. Kelly, Oxide growth at a Si surface and role of radiation effects 91 (1994) 648
Vetter, J., R. Scholz and N. Angert, Investigation of latent tracks from heavy ions in GeS crystals by high resolution TEM 91 (1994) 129
Vetter, J., see Esser, M. 91 (1994) 157
Vogt, D., see Aoki, Y. 91 (1994) 247

Wang, L., see Chadderton, L.T. 91 (1994) 71
Wang, L., see Fink, D. 91 (1994) 146
Wang, L.M., see Weber, W.J. 91 (1994) 63

Watanabe, K., see Awazu, K. 91 (1994) 422
Weber, W.J. and L.M. Wang, Effect of temperature and recoil-energy spectra on irradiation-induced amorphization in $Ca_2La_8(SiO_4)_6O_2$ 91 (1994) 63
White, C.W., see Haglund, Jr., R.F. 91 (1994) 493
White, C.W., see McHargue, C.J. 91 (1994) 549
White, C.W., see Joslin, D.L. 91 (1994) 562
White, C.W., see Joslin, D.L. 91 (1994) 566
Williams, R.T., see Wilson, R.M. 91 (1994) 12
Williams, R.T., see Bennewitz, R. 91 (1994) 623
Wilson, I.H., see Wong, T.K.S. 91 (1994) 639
Wilson, R.M., R.K.R. Thoma, W.E. Pendleton and R.T. Williams, Defect processes induced by electronic excitation at halide crystal surfaces 91 (1994) 12
Wilson, R.M., see Bennewitz, R. 91 (1994) 623
Wolf, G.K., see Schiestel, S. 91 (1994) 473
Wolf, G.K., see Fladry, H. 91 (1994) 575
Wong, T.K.S. and I.H. Wilson, Surface morphology of arsenic implanted silicon dioxide observed by atomic force microscopy 91 (1994) 639

Yamaguchi, I., see Matsue, H. 91 (1994) 97
Yamaguchi, S., see Hasegawa, M. 91 (1994) 263
Yamamoto, S., see Shimatani, N. 91 (1994) 529
Yamanaka, C., see Ogoh, K. 91 (1994) 331
Yamanaka, C., see Kohno, H. 91 (1994) 366
Yamanaka, C. and M. Ikeya, The effects of hyper velocity impact phenomena on radiation induced defects . . 91 (1994) 370
Yamaoka, H., see Yoshinari, T. 91 (1994) 230
Yamazaki, T., see Suzuki, R. 91 (1994) 410
Yang, Li, see Haglund, Jr., R.F. 91 (1994) 493
Yang, Lina, see Haglund, Jr., R.F. 91 (1994) 493
Yoshihara, K., see Matsue, H. 91 (1994) 97
Yoshihara, K., T. Sekine and H. Matsue, Recent studies on appearance energy and hot reaction zone in solid-state reactions in metallocenes and their β-cyclodextrin inclusion compounds 91 (1994) 103
Yoshinari, T., S. Shimanuki, T. Matsuyama, H. Yamaoka and K. Aoyagi, Alkylammonium ion radicals in layered ionic crystals of $(C_nH_{2n+1}NH_3)_2CdCl_4$; $n = 1, 2, 3$ 91 (1994) 230
Yu, Z.-W., see Liu, Z.-M. 91 (1994) 465
Yu, Z.-W., see Zhu, J.-L. 91 (1994) 469

Zhang, J.-C., J.-Q. Shen, Z.-J. Shan, S.-X. Zhou and J.-L. Zhu, Radiation effects in tin dioxide as gas sensors . 91 (1994) 663
Zhou, S.-X., see Zhang, J.-C. 91 (1994) 663
Zhu, J.L., see Chadderton, L.T. 91 (1994) 168
Zhu, J.-L., see Liu, Z.-M. 91 (1994) 465
Zhu, J.-L., Z.-M. Liu, Z.-W. Yu, Y.-P. Guo, Z.-T. Ma and R.-Z. Beng, Effects of ion implantation on the electrical conductivity of polyaniline 91 (1994) 469
Zhu, J.-L., see Zhang, J.-C. 91 (1994) 663
Zhu, Z. and P. Jung, Irradiation induced dimensional changes in ceramics 91 (1994) 269
Zimmerer, G., Electronic sputtering from rare-gas solids 91 (1994) 601
Zinkle, S.J., Microstructure of ion irradiated ceramic insulators 91 (1994) 234
Zuhr, R.A., see Haglund, Jr., R.F. 91 (1994) 493